



EVERLIGHT ELECTRONICS CO.,LTD.

DATA SHEET

PART NO. : ELT-512SURWA/S530-A3

DATE : 2004/6/30

DEPARTMENT : CHR&D1

REVISION : 2

RECEIVED			
<input checked="" type="checkbox"/> MASS PRODUCTION			
<input type="checkbox"/> PRELIMINARY			
<input type="checkbox"/> CUSTOMER DESIGN			
DEVICE NUMBER : CDDT-512-026			
PAGE : 5			
CUSTOMER	DESIGNER	CHECKER	APPROVER

2	Revision update and add Pb free	2004/6/30
REV.	DESCRIPTION	RELEASE DATE

OFFICE: 7C BUILDING, LIAN HUA PORT INDUSTRIAL DISTRICT, LIAN HUA SHAN
 BONDED PRICCESSING ZONE PAN YU, GUANG ZHU, CHINA
 TEL. : (020)84860913,84860914
 FAX : (020)84860600
<http://www.everlight.com>

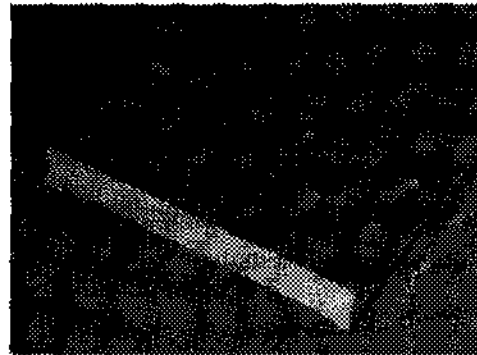


Technical Data Sheet
0.56" Triple Digit Displays

ELT-512SURWA/S530-A3

■ **Features :**

- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.
- Pb free



■ **Descriptions :**

- The ELT-512 series is a large 14.22 mm (0.56")high seven segment display designed for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light.
- These devices are made with white segments and gray surface.

■ **Applications :**

- Audio equipment
- Instrument panels
- Digital read out display

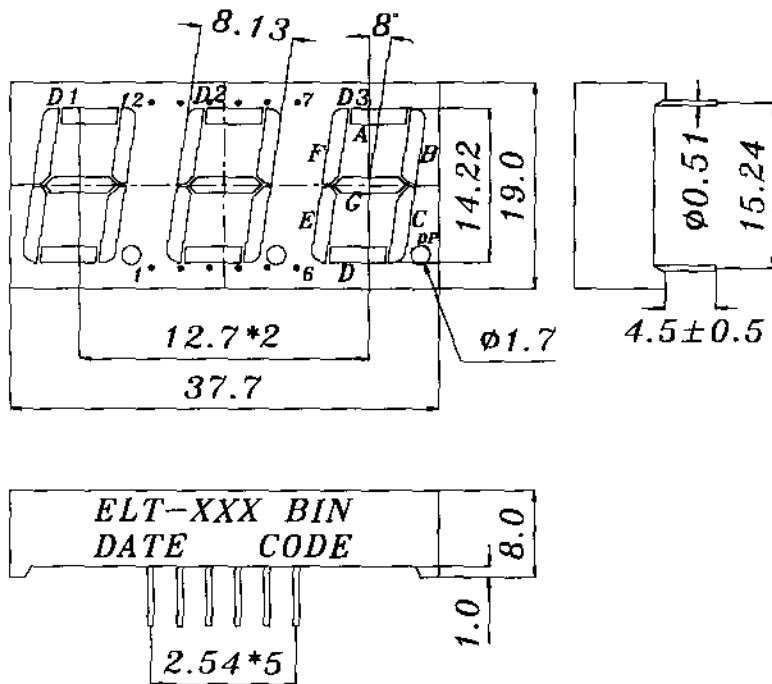
PART NO.	Chip	
	Material	Emitted Color
ELT-512SURWA/S530-A3	AlGaInP	Hyper Red



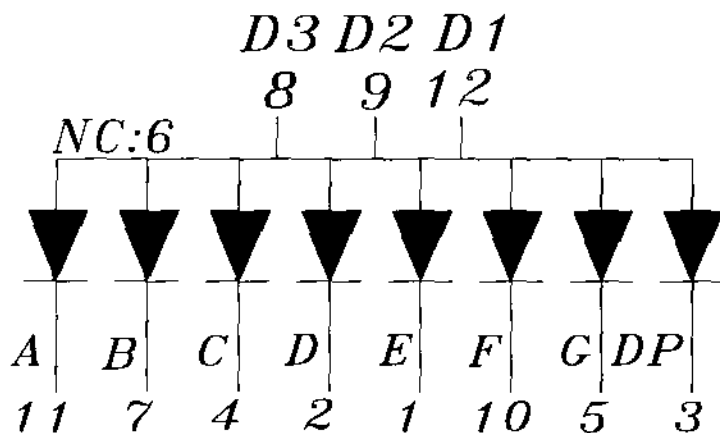
Technical Data Sheet
0.56" Triple Digit Displays

ELT-512SURWA/S530-A3

Package Dimensions



- COMMON ANODE
- 1 CATHODE E
 - 2 CATHODE D
 - 3 CATHODE DP
 - 4 CATHODE C
 - 5 CATHODE G
 - 6 NO CONNECT
 - 7 CATHODE B
 - 8 COMMON ANODE D3
 - 9 COMMON ANODE D2
 - 10 CATHODE F
 - 11 CATHODE A
 - 12 COMMON ANODE D1



Notes: 1. All dimensions are in millimeters , tolerance is 0.25mm unless otherwise noted.
 2. Above specification may be changed without notice.
 Supplier will reserve authority on material change for above specification.

Technical Data Sheet
0.56" Triple Digit Displays
ELT-512SURWA/S530-A3

■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	25	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	P _d	60	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	I _{F(Peak)}	160	mA

■ Electronic optical characteristics :

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	I _v	----	3.5	----	mcd	I _F =2mA
			7.80	17.60	----		I _F =10mA
	Per decimal point		----	1.0	----	mcd	I _F =10mA
			2.5	5.6	----		
Peak Wavelength		λ _p	----	632	----	nm	I _F =20mA
Dominant Wavelength		λ _d	----	624	----	nm	I _F =20mA
Spectrum Radiation Bandwidth		Δλ	----	20	----	nm	I _F =20mA
Forward Voltage		V _F	----	2.0	2.4	V	I _F =20mA
Reverse Current		I _R	----	----	100	μA	V _R =5V

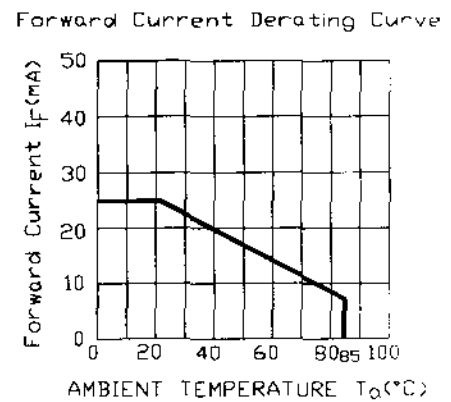
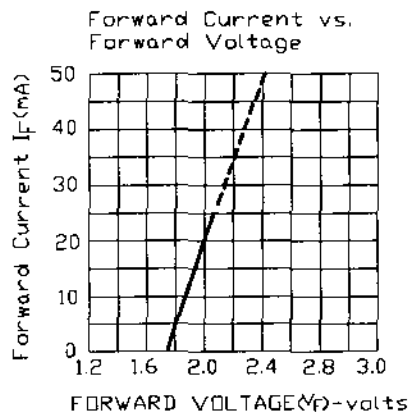
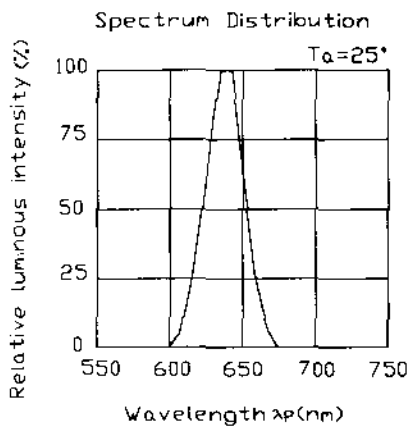


Technical Data Sheet
0.56" Triple Digit Displays

ELT-512SURWA/S530-A3

■ Typical Electro-Optical Characteristic Curves:

(SUR)



**Technical Data Sheet
0.56" Triple Digit Displays****ELT-512SURWA/S530-A3****■ Reliability test items and conditions:**

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	IF = 10 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1